INSTALLATION MANUAL

MUZ-GA25/GA35VA (H)

- Please provide an exclusive circuit for the air conditioner and do not connect other electrical appliances to it.
- Be sure to read "THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY" before installing the air conditions Be sure to observe the cautions specified here as they include important items
- related to safety. • The indications and meanings are as follows.

Could lead to death, serious injury, etc.

⚠ CAUTION

 After reading this manual, be sure to keep it together with the OPERATING INSTRUCTIONS in a handy place on the customer's site.

↑ WARNING

Could lead to serious injury in particular environments when operated incorrectly.

Do not install the unit by yourself (customer). Incomplete installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.

- Install the unit securely in a place which can bear the weight of the unit. When installed in an insufficient strong place, the unit could fall causing injury. ■ Use the specified wires to connect the indoor and outdoor units securely
- the stress of the wires is not applied to the sections. Incomplete connecting and fixing could cause fire. ■ Do not use intermediate connection of the power cord or the extension cord and do not connect many devices to one AC outlet.
- It could cause a fire or an electric shock due to defective contact, defective insulation, exceeding the permissible current, etc. ■ Check that the refrigerant gas do not leak after installation has com-
- If refrigerant gas leaks indoors, and comes into contact with the fire of a fan heater, space heater, stove, etc., harmful substances will be generated. Perform the installation securely referring to the installation manual.
- Incomplete installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water. ■ Perform electrical work according to the installation manual and be sure
- to use an exclusive circuit. If the capacity of the power circuit is insufficient or there is incomplete
- electrical work, it could result in a fire or an electric shock. ■ Attach the electrical cover to the indoor unit and the service panel to the outdoor unit securely
- If the electrical cover in the indoor unit and/or the service panel in the outdoor unit are not attached securely, it could result in a fire or an electric shock due to dust, water, etc.
- Be sure to use the part provided or specified parts for the installation The use of defective parts could cause an injury or leakage of water due to a
- fire, an electric shock, the unit falling, etc. ■ Be sure to cut off the main power in case of setting up the indoor electronic control P.C. board or wiring works.
- It could cause an electric shock. ■ The appliance shall be installed in accordance with national wiring
- When installing or relocating the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit. Any presence of foreign substance such as air can cause abnormal pressure rise or an explosion.

FLARED CONNECTIONS This unit has flared connections on both indoor and outdoor sides. Remove the outdoor units valve cover, then connect the pipe.

3. INSTALLATION DIAGRAM & ACCESSORIES

 Refrigerant pipes are used to connect the indoor and outdoor units. Be careful not to crush or bend the pipe in pipe bending.

LIIIIIIS		
Pipe length	20 m max.	
Height difference	12 m max.	
No. of bends	10 max.	
Refrigerant adjustment (R410A) charge is require.	. If pipe length exceeds 7 m, a	additi

(The outdoor unit is charged with refrigerant for pipe length up to 7 m.) Up to 7 m No additional charge is required.

Pipe length	Exceeding 7 m	Additional charge is required.		
		Exceeding 7 III	(Refer to the table below.)	
	Refrigerant to be added		30 g/m × (refrigerant piping length (m	
		_		

ACCESSORIES Check the following parts before installation <Indoor unit>

 Installation plate Installation plate fixing screw 4 × 25 mm 4 Fixing screw for 3 3.5 × 16 mm (Black) Battery (AAA) for remote controller

Felt tape (Used for left or left-rear piping) QUICK CLEAN KIT

PART TO BE PROVIDED AT YOUR SITE

Optional extension pipe (4-core 1.0 mm²) B Extension pipe Wall hole sleeve Wall hole cover Pipe fixing band (The quantity depends 2 to 5 on the pipe length. Fixing screw for **(B)** 4 × 20 mm (The 2 to 5 quantity depends on the pipe length.) Piping tape Putty Drain hose (or soft PVC. hose, 15 mm 1 or 2 inner dia. or hard PVC pipe VP16)

Refrigeration oil Power supply cord (See the table in 5-1 INDOOR/OUTDOOR UNIT CONNECTING WIRE CONNECTION for the cord size.) 500 mm ா Air inlet

When operating the air conditioner in low outside temperature,

2-10 mm × 21 mm slot

- be sure to follow the instructions described below. Never install the outdoor unit in a place where its air inlet/ outlet side may be exposed directly to wind.
- To prevent exposure to wind, install the outdoor unit with its air inlet side facing the wall.
- To prevent exposure to wind, it is recommended to install a baffle board on the air outlet side of the outdoor unit.

[FLARE CONNECTION TYPE]

⚠ CAUTION ■ Earth the unit. Do not connect the earth to a gas pipe, water pipe, lightning rod or telephone

- earth. Defective earthing could cause an electric shock ■ Do not install the unit in a place where an inflammable gas leaks. If gas leak and accumulate in the area surrounding the unit, it could cause an
- Install an earth leakage breaker depending on the installation place (Where it is humid).
- If an earth leakage breaker is not installed, it could cause an electric shock. ■ Perform the drainage/piping work securely according to the installation
- If there is a defect in the drainage/piping work, water could drop from the unit and household goods could be wet and damaged. Fasten a flare nut with a torque wrench as specified in this manual.

When fastened too tight, a flare nut may broken after a long period and cause

2. SELECTING THE INSTALLATION LOCATION

2-1 INDOOR UNIT

a leakage of refrigerant.

- Where airflow is not blocked Where cool air spreads over the entire room. Maximum refrigerant piping length between indoor unit and outdoor unit is 20 m and the difference of height of both units is 12 m.
- Rigid wall without vibration Where it is not exposed to direct sunshine. Where easily drained.
- At a distance 1 m or more away from your TV and radio. Operation of the air and attach the wires firmly to the terminal block connecting sections so conditioner may interfere with radio or TV reception in areas where reception is weak. An amplifier may be required for the affected device.
 - In a place as far away as possible from fluorescent and incandescent lights (so the infrared remote control can operate the air conditioner normally). Where the air filter can be removed and replaced easily.

2-2 OUTDOOR UNIT

- Where it is not exposed to strong wind. Where airflow is good and dustless.
- Where it is not exposed to rain and direct sunshine • Where neighbours are not annoyed by operation sound or hot air.
- Where rigid wall or support is available to prevent the increase of operation sound or vibration.
- Where there is no risk of combustible gas leakage. When installing the unit at a high level, be sure to fix the unit legs.
- Where it is at least 3 m away from the antenna of TV set or radio. Operation of the air conditioner may interfere with radio or TV reception in areas where reception is
- weak. An amplifier may be required for the affected device. Install the unit horizontally. Please install it in an area not affected by snowfall or blowing snow. In areas with

heavy snow, please install a canopy, a pedestal and/or some baffle boards.

It is advisable to make a piping loop near outdoor unit so as to reduce vibration transmitted from there.

↑ CAUTION Avoid the following places for installation where air conditioner trouble is liable to

- Where flammable gas could leak. Where there is much machine oi Salty places such as the seaside.
- Where sulfide gas is generated such as a hot spring. Where there is high-frequency or wireless equipment.
- 2-3 WIRELESS REMOTE CONTROLLER MOUNTING Place of mounting
- Where it is easy to operate and easily visible. Where children can not touch.
- Mounting Select a position about 1.2 m above the floor, check that signals from the remote controller are surely received by the indoor unit from that position ('beep' or 'beep beep' receiving tone sounds). After that, attach remote controller holder 3 to a

pillar or wall and set the wireless remote controller 6. In rooms where inverter type fluorescent lamps are used, the signal from the

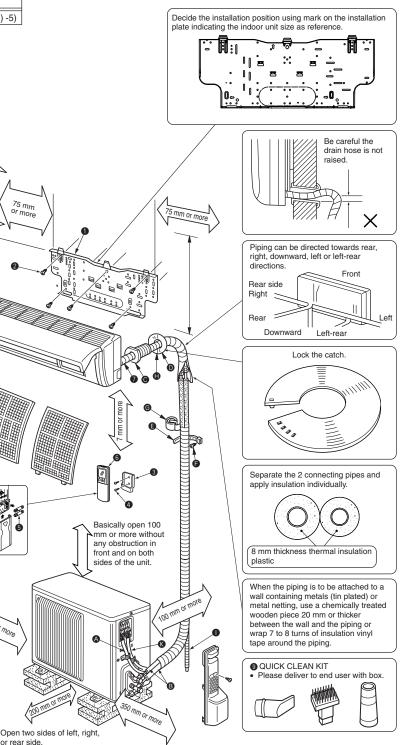
wireless remote controller may not be received.

	Use the refr	Use the refrigerant pipes that meet the following specifications.				
ı	Pipe	Outside diameter	Insulation thickness	Insulation material		
		mm	mm	irisulation material		
	For liquid	6.35	8	Heat resisting foam plasti		
	For gas	9.52	8	0.045 specific gravity		
Use a copper pipe or a copper-alloy seamless pipe with a thickness of 0.8 mm. Never use any pipe with a thickness less than 0.8 mm, as the pressure resistant.						

is insufficient. ② Ensure that the 2 refrigerant pipes are insulated to prevent condensation 3 Refrigerant pipe bending radius must be 100 mm or more.

Be sure to use the insulation of specified thickness. Excessive thickness may cause incorrect installation of the indoor unit and lack of thickness may cause

⚠ CAUTION



Units should be installed by licensed contractor

according to local code requirement.

4. INDOOR UNIT INSTALLATION

4-1 FIXING OF INSTALLATION PLATE

• Find a structural material (such as a stud) in the wall and fix installation plate Bind the line to the center hole 66 mm or more

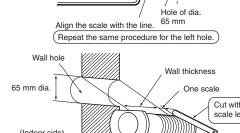
and left back piping (using plate 🕦 screw 2 4 × 25 mm To prevent the installation plate from vibrating, be sure to fix the holes as indicated by the arrows 1.

When bolts recessed in the concrete wall are to be utilized, secure the installation plate \bullet using $11 \times 20 \cdot 11 \times 26$ oval hole (450 mm pitch). If the recessed bolt is too long, change it for a shorter one available in the market.

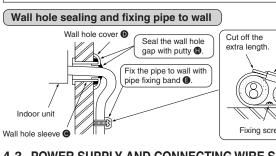
4-2 WALL HOLE DRILLING

 Determine the wall hole position. Drill a 65 mm hole so that outside can be lower than inside. Insert the wall hole sleeve .

Positioning of the holes on the wall



(Wall hole cross section) Be sure to use wall hole sleeve **(9)** to prevent the outdoor connecting wires from contacting with metal part in the wall and to prevent damage by rat in case the wall is hollow.



4-3 POWER SUPPLY AND CONNECTING WIRE SPECIFICATIONS Use special room air conditioning circuit.

Indoor/outdoor unit connecting wire Specification	Cable 4-core 1.0 mm², in conformity with Design 245 IEC 57.	
⚠ WARNING		
Never cut the indoor and outdoor unit connecting wire and connect it to other it may cause a fire.		

6. INDOOR/OUTDOOR UNIT CONNECTION

• This room air conditioner adopts an HFC refrigerant (R410A) which will never destroy

• Pay particular attention to the following points, though the basic installation procedure

(1) As R410A has a working pressure approx. 1.6 times as high as that of R22, some

Take sufficient care not to allow water and other contaminations to enter the

For refrigerant piping, use clean, pressure-proof parts / materials specifically

(4) Composition change may occur in R410A since it is a mixed refrigerant. When

6-1 Tools dedicated for the air conditioner with R410A

The diameter of the service port on the stop valve in outdoor unit has been changed to

prevent any other refrigerant being charged into the unit. (Cap size has been changed

R410A has high pressures beyond the meas-

Port diameters have been changed to prevent

any other refrigerant from being charged into the

Hose material and cap size have been changed

Clamp bar hole has been enlarged to reinforce

Provided for flaring work (to be used with R22

Provided to prevent the back flow of oil. This

adapter enables you to use existing vacuum

It is difficult to measure R410A with a charging

cylinder because the refrigerant bubbles due to

rement range of existing gauges.

o improve the pressure resistance

Dedicated for HFC refrigerant

the spring strength in the tool.

1/4 and 3/8

The following tools are required for R410A refrigerant. Some R22 tools can be

from 7/16 UNF with 20 threads to 1/2 UNF with 20 threads.)

No: Not substitutable for R410A Yes: Substitutable for R410A

• Main cause of gas leakage is defect in flaring work.

Cut the copper pipe correctly with pipe cutte

avoid to let burrs drop in the piping.

Carry out correct flaring work in the following procedure

• Completely remove all burrs from the cut cross section of pipe.

· Put the end of the copper pipe to downward direction as you remove burrs in order to

charging, charge liquid refrigerant to prevent composition change.

special tools and piping parts / materials are required. (Refer to the table below.)

R410A refrigerant during storage and installation, since it is more susceptible to

INSTALLATION INFORMATION FOR THE AIR CONDI-

Do not bundle the spare wire, but put it as shown below.

FINISHING AND TEST RUN

TIONER WITH R410A REFRIGERANT

is same as that for R22 air conditioners

contaminations than R22.

designed for R410A.

refrigerant

substituted for R410A tools.

Gauge manifold

Charge hose

Gas leak detector

Torque wrench

Flare tool

Flare gauge

Vacuum pump

Electronic scale

6-2 FLARING WORK

1 Pipe cutting

for refrigeran

charging

the ozone layer.

4-4 INDOOR AND OUTDOOR CONNECTING WIRE CON-

- You can connect indoor/outdoor lead wire without removing the front panel. Remove the corner box.
- Remove the VA clamp Process the end of the earth wire and connect the wire to the earth terminal of the
- electrical parts box. Process the end of the indoor/outdoor unit connecting wire and fix the wire to the terminal block. Secure the indoor/outdoor unit connecting wire and the earth wire with the VA clamp.
- Reinstall the corner box. Never fail to hook the right claw or the VA clamp to secure indoor/outdoor unit connecting wire **(A)**.

part of its core is appeared r/outdoor unit connecting wire 🛭 **↑** WARNING • Use the indoor/outdoor unit connecting wire that meets the Standards to connect

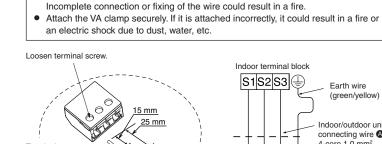
no external force is conveyed to the connecting section of the terminal block.

the indoor and outdoor units and fix the wire to the terminal block securely so that

Securely push the wire into

the terminal block until no

S1|S2|S3|@



|S1|S2|S3|(= Outdoor terminal block

- ♠ CAUTION Be careful not to make mis-wiring. • Firmly tighten the terminal screws to prevent them from loosening After tightening, pull the wires lightly to confirm that they do not move.
- If the connecting wire is incorrectly connected to the terminal block, the unit does not operate normally • If an earth is incorrect, it may cause an electric shock.

• Make earth wire a little longer than the others. (more than 55 mm)

Remove flare nuts attached to indoor and outdoor Flare nut

units, then put them on pipe having completed

Carry out flaring work using flaring tool as shown below.

Flare tool for R410A

0 to 0.5

0 to 0.5

Firmly hold copper pipe in a die in the dimension shown in the table above.

Fasten a flare nut with a torque wrench as specified in the table below

Apply a thin coat of refrigeration oil
on the seat surface of pipe.

13.7 to 17.7 140 to 180

For outdoor unit side, surely insulate every piping including valves.

• Stop the end of piping tape **6** with tape (with adhesive agent attached).

Using piping tape **6**, apply taping starting from the entry of outdoor unit.

• When piping have to be arranged through above ceiling, closet or where the

temperature and humidity are high, wind additional commercially sold insulation for

34.3 to 41.2 | 350 to 420

connect both liquid and gas pipings to indoor unit.

When fastened too tight, a flare nut may broken after a long period and cause a leakage

• For connection first align the center, then tighten the first 3 to 4 turns of flare nut.

section, and tighten using two wrenches. Excessive tightening damages the flare

Connect pipes to stop valve pipe joint of the outdoor unit in the same manner applied for

• For tightening, use a torque wrench or spanner and use the same tightening torque

• Use tightening torque table below as a guideline for indoor unit side union joint

• If flare is noted to be defective, cut off the flared section and do flaring work again

clutch type

· Compare the flared work with figure below.

6-3 PIPE CONNECTION

of refrigerant.

Indoor unit connection

Outdoor unit connection

applied for indoor unit.

INSULATION AND TAPING

Cover piping joints with pipe cover

Conventional flare tool

Clutch type

1.0 to 1.5

1.0 to 1.5

Smooth all around Inside is shining without any scratches

Wing nut type

1.5 to 2.0

1.5 to 2.0

(not possible to put them on after flaring work)

Flare nut for R410A pipe differs from R22 pipe.

Refer to the following table for detail

ø9.52

Outside diameter

ø6.35 mm

ø9.52 mm

4-5 AUTO RESTART FUNCTION

- These models are equipped with an auto restart function. If you do not want to use this function, please consult the service representative because the setting of the unit
- needs to be changed. • When the indoor unit is controlled with the remote controller, the operation mode, the set temperature, and the fan speed are memorized by the indoor electronic control PC board The auto restart function sets to work the moment the power has restored after power failure, then, the unit will restart automatically. If the unit is operated in "AUTO" mode before power failure, the operation mode (COOL, DRY or HEAT) is not stored in the memory. When the main power is turned on, the unit decides the operation mode by the initial room temperature at restart and starts operation again.

 If the main power has been cut, the operation settings remain. ② When three minutes have passed after power was restored, the unit will restart automatically according to the memory.

• The operation settings are memorized when 10 seconds have passed after the

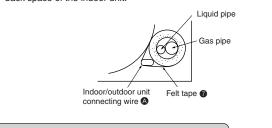
- remote controller was operated • If the main power is turned off or a power failure occurs while AUTO START/STOP timer is active, the timer setting is cancelled. As these models are equipped with an
- same time that power is restored. • If the unit has been off with the remote controller before power failure, the auto restart function does not work as the power button of the remote controller is off.

auto restart function, the air conditioner starts operating with timer cancelled at the

• To prevent breaker off due to the rush of starting current, systematize other home appliances not to turn on at the same time.

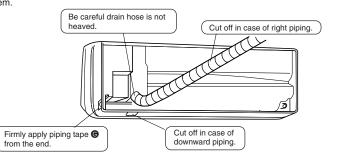
4-6 PIPE FORMING

- Place the drain hose below the refrigerant piping.
- Make sure that the drain hose is not heaved or snaked. Do not pull the hose to apply the tape.
- When the drain hose passes the room, be sure to wrap insulation material (obtain able at a store) around it. • Wrap the felt tape * around the pipe and the drain hose, then put the pipe in the back space of the indoor unit.



FOR REAR, RIGHT OR DOWNWARD PIPING Pipe arrangemen

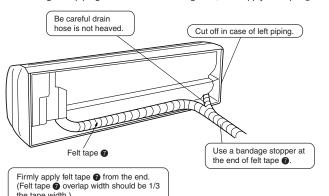
Put the refrigerant piping and the drain hose together, then apply piping tape @ to Be careful drain hose is no



- Insert the piping and the drain hose into the wall hole sleeve **©**, and hook the upper
- part of the indoor unit on the installation plate 1. • Check if the indoor unit is hooked securely on the installation plate • by moving the unit to left and right.
- Thrust the lower part of the indoor unit into the installation plate 1

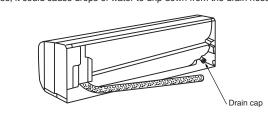
FOR LEFT OR LEFT-REAR PIPING

Put the refrigerant piping and the drain hose together, then apply felt tape 7 to them.



REATTACHING DRAIN HOSE

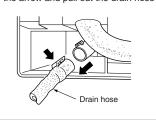
Be sure to reattach the drain hose and the drain cap in case of left or left-rear piping. Otherwise, it could cause drops of water to drip down from the drain hose



 $oldsymbol{\cup}$ Pull out the drain cap at the rear right of the indoor unit.

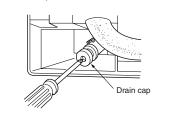
Hold the convex section at the end and pull the drain cap.





Put the drain cap into the section to which the drain hose is to be attached at the rear of the indoor unit.

Insert the screwdriver, etc. (not sharp-edged tool) into the hole at the end of the cap and insert the cap fully into the drain pan.



Insert the drain hose into the section to which the drain hose is to be attached at the rear right of the indoor unit.

Insert the drain hose fully into the drain pan. Check if the hose is hooked securely to the projection of its inserting part at the drain pan

Press it once, and after test run for 30 minutes the EMERGENCY COOL MODE starts.

If the left side lamp of the operation indicator blinks every 0.5 seconds, inspect the

(The operation mode changes in order of \bigcirc ~ $\ \ \, \mbox{@ every time the EMERGENCY}$

In starting the heating operation, indoor unit fan may not operate to prevent blowing

Checking the remote (infrared) signal reception

will not operate for three minutes to protect the air conditioner.

Has the indoor/outdoor connecting wire been secured firmly?

Has the leak test been carried out for the pipe connections?

☐ Is the area under the unit free of objects that block the air outlet?

SHOULD ALWAYS BE OBSERVED FOR SAFETY" been checked?

Are the vertical and horizontal vanes closed securely?

6-7 EXPLANATION TO THE CUSTOMER

6-6 CHECKING AFTER INSTALLATION

] Is the power line equipped with the circuit breaker?

Is the specified power supply voltage used?

the units (no intermediate connections)?

Is the earth wire connected proper

] Has air purging been carried out?

] Is the drain hose properly installed?

ls the front panel installed securely?

Are the stop valves open fully?

cool air. Please wait for a few minutes until the temperature of heat exchanger rises and

Press the ON/OFF button on the remote controller and check that an electronic sound is

heard from the indoor unit. Press the ON/OFF button again to turn the air conditioner off.

run and the emergency operation are released by commands from

Once the compressor stops, the restart preventive device operates so the compressor

After finishing the installation, check the following items and mark the $\hfill\square$ next to each

] Have the ends of the indoor/outdoor connecting wire been properly inserted into the

Are the power supply cord and indoor/outdoor connecting wire connected directly to

 \sqsupset Is the earth wire longer than the other wires so that it will not become disconnected

Are the pipes designed for use with R410A or do they have the specified thickness?

Are the pipes at the rear of the unit bundled with felt tape (for left and left-rear piping

 $\hfill \square$ Can the installation location bear the weight of the unit and not amplify its vibration or

Has the drain work been performed properly and are there no bubbling sounds?

Have all of the \(\tilde{\Lambda}\) WARNING and \(\tilde{\Lambda}\) CAUTION items in "1. THE FOLLOWING

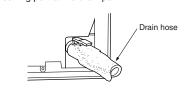
• Using the OPERATING INSTRUCTIONS, explain the following to the customer, how to

control temperature, how to remove the air filters, how to remove or put the remote

controller in the remote controller holder, how to clean, precautions for operation, etc.

Recommend the customer to read the OPERATING INSTRUCTIONS carefully.

Has water been poured through the drain hose to confirm proper drainage?



Press the EMERGENCY OPERATION switch.

indoor/outdoor unit connecting wire A for mis-wiring.

Press it once more, and the operation stops

OPERATION switch is pressed."

Mode | Operation Indicator lamp

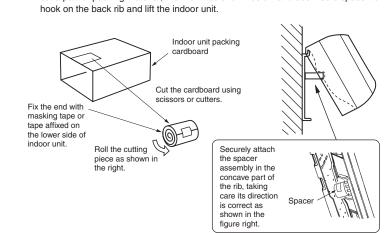
 \bigcirc

3 STOP

Press it once more, and the EMERGENCY HEAT MODE starts.

INDOOR UNIT INSTALLATION

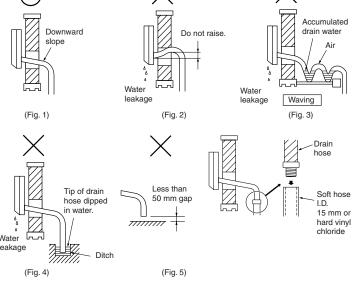
 Insert the drain hose into the wall hole sleeve . and hook the upper part of indoor unit on the installation plate 1. Then, move the unit to the very edge of the left side for putting the piping easily in the back space of the indoor unit. After that cut a part of packing material, then roll it as shown below and use it as a spacer to



• Connect the refrigerant piping with the extension pine **B**. Thrust the lower part of the indoor unit into the installation plate

4-7 DRAIN PIPING

• The drain hose should point downward for easy drain flow. (Fig. 1) Do not make drain piping as shown in Fig. 2 to 5.



• If the drain hose provided with the indoor unit is too short, connect it with drain hose **1** that should be provided at your site. If the extension drain hose has to pass through a room, be sure to wrap it with commercially sold insulation.

5. OUTDOOR UNIT INSTALLATION 5-1 INDOOR/OUTDOOR UNIT CONNECTING WIRE

CONNECTION • Connect the indoor/outdoor unit connecting wire (A) from the indoor unit correctly

 Connect the power supply cord **(S)**. • For future servicing, give extra length to connecting wire. • Peel off both ends of connecting wire (extension wire). Be careful not to contact connecting wire with piping. 15 mm Make earth wire a little longer than the others. (more than 35 mm)

• For the indoor/outdoor unit connecting wires, be sure to use the ones in compliance with the standards. Be sure to push the core until it is hidden and pull each cable to make sure that it

is not pulled up incomplete insertion may cause a risk of burning the terminal Power supply cord specifica-Cable 3-core 1.0 mm², in conformity with Indoor and Outdoor connecting | Cable 4-core 1.0 mm², in conformity with

Do not use the drain socket 8 in the cold region. Drain may freeze and it makes the

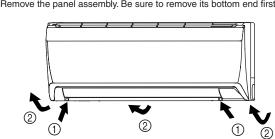
7. FOR MOVEMENT AND MAINTENANCE

Design 245 IEC 57

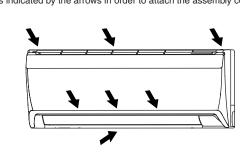
on the terminal block.

wire specification

Removal procedure Remove the 2 screws which fix the panel assembly.



Install the panel assembly following the removal procedure $\mathbin{\textcircled{\scriptsize 1}}$ and $\mathbin{\textcircled{\scriptsize 2}}$ (described above) in reverse. After having attached the panel assembly, be sure to press the positions as indicated by the arrows in order to attach the assembly completely to the



7-2 PUMPING DOWN When relocating or disposing of the air conditioner, pump down the system following the procedure below so that no refrigerant is released into the atmosphere.

② Fully close the stop valve on the liquid pipe side of the outdoor unit. Close the stop valve on the gas pipe side of the outdoor unit almost completely so that it can be easily closed fully when the pressure gauge shows -0.101 MPa [Gauge] (0 kgf/cm²). 4 Start the EMERGENCY COOLING OPERATION.

OPERATION switch once. (The EMERGENCY COOLING OPERATION can be performed continuously for up to 30 minutes.) (5) Fully close the stop valve on the gas pipe side of the outdoor unit when the pressure gauge shows 0.05 to 0 MPa [Gauge] (approx. 0.5 to 0 kgf/cm²). Stop the EMERGENCY COOLING OPERATION.

Remove the bottom of the indoor unit from the installation plate.

Release both left and right bottom corner part of indoor unit and pull it downward and forward as below to release the hooks.

Earth wire

|S1|S2|S3|(

Connect to the power switch which has a gap of 3 mm or more when open to

/ WARNING

• A means for disconnection of the supply with an isolation switch, or similar

device, in all active conductors shall be incorporated in the fixed wiring.

(When the power switch is shut off, it must interrupt all phases.)

Never cut the power cord and connect it to other wires.

(Rated Voltage/Frequency: 230 V/50 Hz)

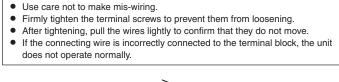
(Input capacity Main switch/Fuse:10 A)

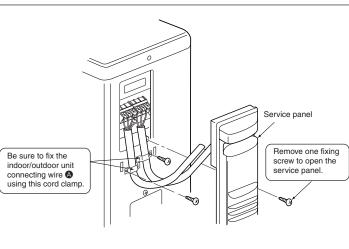
It may cause a fire.

<Connection details>

erminal block

Power supply cord & 3-core 1.0 mn





Be sure to attach the service panel of the outdoor unit securely. If it is not attached correctly, it could result in a fire or an electric shock due to dust, water, etc.

5-2 DRAIN PIPING FOR OUTDOOR UNIT

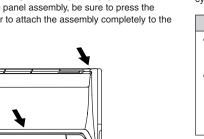
• Provide drain piping before indoor and outdoor piping connection. (It will be hard to install drain socket 8 if indoor and outdoor piping connection is conducted prior to drain piping as outdoor unit becomes immovable.) Connect the drain hose ① (obtainable at a store, inside diameter: 15 mm) as



If the above method cannot be used

7-1 HOW TO REMOVE AND INSTALL THE PANEL **ASSEMBLY**

Remove the panel assembly. Be sure to remove its bottom end first.

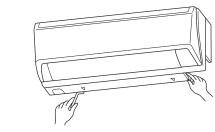


(1) Connect the gauge manifold valve to the service port of the stop valve on the gas pipe side of the outdoor unit.

To start the EMERGENCY OPERATION in COOL MODE, disconnect the power supply plug and/or turn off the breaker. After 15 seconds, connect the power supply plug and/or turn on the breaker, and then press the EMERGENCY

Press the EMERGENCY OPERATION switch twice to stop the operation. 7-3 REMOVING THE INDOOR UNIT

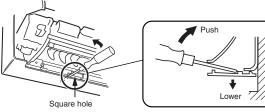
When releasing the corner part



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Remove the panel and insert hexagonal wrenches into the square holes on the left

and right as shown in the figure below, then push them up; the bottom of the indoor



7-4 GAS CHARGE (1) Connect gas cylinder to the service port of stop valve (3-way)

to use liquid refrigerant.

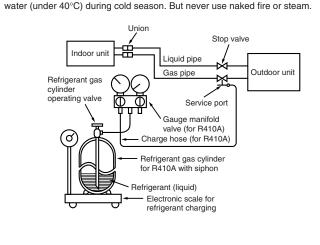
Execute air purge of the pipe (or hose) coming from refrigerant gas cylinder. Replenish specified amount of the refrigerant, while operating the air conditioner In case of adding refrigerant, comply with the quantity specified for the refrigerating

↑ CAUTION • Do not discharge the refrigerant into the atmosphere. Take care not to discharge refrigerant into the atmosphere during installation,

When charging the refrigerant system with additional refrigerant, be sure

Adding gas refrigerant may change the composition of the refrigerant in the system and affect normal operation of the air conditioner. Also, charge the system slowly, otherwise the compressor will be locked. To maintain the high pressure of the gas cylinder, warm the gas cylinder with warm

reinstallation, or repairs to the refrigerant circuit.

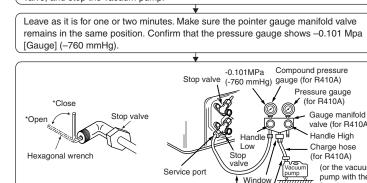


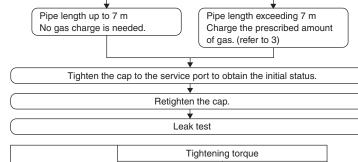
This product is designed and intended for use in the residential, commercial and light-industrial environment. The product at hand is based on • Low Voltage Directive 73/23/ EEC the following EU regulations: • Electromagnetic Compatibility Directive 89/336/

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Connect the gauge manifold valve and the vacuum pump to the service port of the





• Before performing the test run, recheck for any wrong wiring. Wrong wiring prevents normal operation or results in blown fuse disabling operation

13.7 to 17.7

19.6 to 29.4

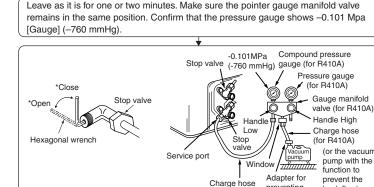
140 to 180

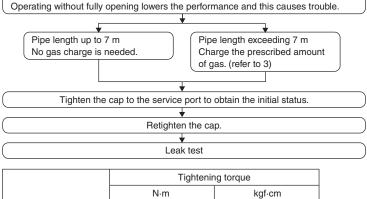
200 to 300

If they are blinking, the horizontal vane is not installed correctly. In this case, disconnect the power supply plug and/or turn off the breaker, and then reinstall the horizontal vane. (See the OPERATING INSTRUCTIONS.)

PURGING PROCEDURES

Run the vacuum pump. (Vacuumize for more than 15 minutes.) Check the vacuum with the gauge manifold valve, then close the gauge manifold valve, and stop the vacuum pump. remains in the same position. Confirm that the pressure gauge shows -0.101 Mpa





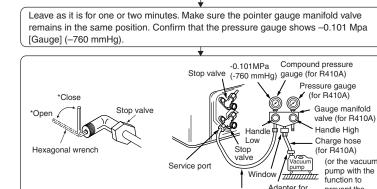
Cap for service por Cap for stop valve

• The test run can be started by pressing EMERGENCY OPERATION switch. When (continuous operation) for 30 minutes.

3 Putting nut on 6-4 PURGING PROCEDURES-LEAK TEST

Connect the refrigerant pipes (both liquid pipe and the gas pipe) between the indoor and the outdoor unit. Remove the service port cap of the stop valve on the side of the outdoor unit gas

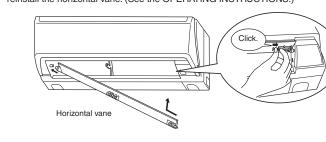
stop valve on the gas pipe side of the outdoor unit.



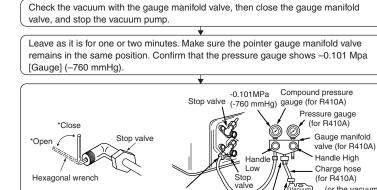
*4 to 5 turns

both sides of gas pipe and liquid pipe.

the EMERGENCY OPERATION switch is once pressed, the unit will start the test run A thermostat does not work during this time. After 30 minutes the unit will start the EMERGENCY OPERATION at a fixed temperature setting of 24 °C in COOL MODE. Perform test run in the following procedure.



pipe. (The stop valve will not work in it initial state fresh out of the factory (totally



back flow) Remove the gauge manifold valve quickly from the service port of the stop valve. After refrigerant pipes are connected and evacuated, fully open all stop valves on

6-5 TEST RUN

Insert the power supply plug into the power outlet and/or turn on the breaker. Check that all LED lamps are not lit.

